



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

PUBLIC HEALTH REPORTS.

UNITED STATES.

[Reports to the Surgeon-General, Public Health and Marine-Hospital Service.]

An American standard for tetanus antitoxin—Sterilization of sewage filter-effluent. From the proceedings of the Society of American Bacteriologists.

Passed Asst. Surg. M. J. Rosenau, Director of the Hygienic Laboratory, was detailed to attend the meeting of the Society of American Bacteriologists, held at New York December 27 and 28, 1906. He reports as follows:

This meeting of the society was of special interest to the Service on account of the action taken upon the question of standardizing tetanus antitoxin. There are five or six preparations of tetanus antitoxin at present upon the American market. Each one of these serums is standardized in accordance with a different method. In view of the great value of tetanus antitoxin as a prophylactic and the increasing use of it for this purpose, it is of considerable importance to establish a uniform system of measurement. This task naturally falls upon the Hygienic Laboratory of the Service, in accordance with the law approved July 1, 1902. Work upon this subject has been going on in the Hygienic Laboratory for the last two years. The crux of the problem lies in obtaining a stable tetanus toxin. This having been accomplished, a satisfactory official standard is now made possible.

The paper upon "The stability of tetanus toxin," read by the writer at the meeting, shows that a precipitated tetanus poison preserved under conditions of absolute dryness in vacuum, and in the cold and dark, retains its strength for at least 8 months. This precipitated toxin, exposed to the sunlight, moisture, and body temperature, loses its strength very slowly; so that it may be depended upon for several weeks when preserved under conditions less exacting than those under which it can be kept in the Hygienic Laboratory. Some of this toxin had been sent to other laboratories to determine whether it would stand the practical test of transportation, and it was found that it fully satisfied the demands of a Government standard.

Based largely upon this work, the committee on the standardization of serums of the Society of American Bacteriologists made the following report, which was unanimously adopted:

That tetanus antitoxin be standardized by the tetanus toxin furnished by the Public Health and Marine-Hospital Service. The unit is 10 times the least amount of serum necessary to save the life of a 350-gram guinea pig for 96 hours against the official test dose of the standard toxin. The test dose is 100 minimal lethal doses of a precipitated toxin preserved under special conditions at the Hygienic Laboratory of the

Public Health and Marine-Hospital Service. It was decided that the minimal immunizing dose for a case of possible infection through a wound should be 3,000 of such units. It was decided that after April 1 the new unit should be adopted by all producers of tetanus antitoxin.

J. J. KINYOUN, *Chairman*.
THEOBALD SMITH.
HERBERT D. PEASE.
E. M. HOUGHTON.
JOSEPH MCFARLAND.
M. J. ROSENAU.
WILLIAM H. PARK, *Secretary*.

A paper read upon "The sterilization of sewage filter-effluent," by E. B. Phelps, sanitary research laboratory of the Massachusetts Institute of Technology, deserves special attention on account of its importance to the public health. Mr. Phelps had little to say concerning the disposal of sewage by the method of farming and irrigation because favorable conditions for this method, which is generally admitted the best, do not obtain commonly in the vicinity of American cities. He did not discuss the method of sewage purification by sand filtration on account of its slowness and expense. He also reported the failure of the sprinkling or contact method to remove the pathogenic forms of bacteria. Mr. Phelps found that the addition of bleaching powder in the proportion of 1 part of available chlorine to 1,000,000 of sewage, costing about \$1.08 per 1,000,000 gallons, was a thoroughly reliable method; he thought less of the use of copper sulphate, although he found it to be fairly effective in 2 parts per 1,000,000 of sewage.

Report from South Atlantic Quarantine, Ga.—Death from beriberi among crew of bark Medbor.

Acting Assistant Surgeon Brinkley, in temporary charge, reports, January 7, as follows:

A death from beriberi occurred on January 4 in the person of a seaman from the Norwegian bark *Medbor*.

The remaining 13 members of the crew, 7 of whom are suffering from beriberi, are still at this station. One patient is unable to walk.

On January 14 the Bureau authorized the release of the bark *Medbor* and crew, directing the officer in charge to notify the health officer at the port of destination, in advance, of the vessel's departure.

The *Medbor* was reported arrived at Cumberland Sound Quarantine, Fla., December 30, with beriberi on board. The vessel proceeded to South Atlantic Quarantine, Ga., arriving January 3 with 8 cases of beriberi among the crew. (See Public Health Reports, Jan. 11, 1906, p. 21.)

Report from Vanceboro, Me.—Smallpox on Canadian border—Train inspection.

Acting Assistant Surgeon Young reports, January 7, as follows:

Week ended January 5, 1907. Inspected 18 passenger trains carrying about 1,150 passengers. Thirty passengers vaccinated. Official certificates of vaccination and non exposure to infection accepted in the case of 43 who came from the infected districts in New Brunswick and Nova Scotia.

Smallpox has developed in Wallace and Parrsboro, Nova Scotia. The infected towns in Nova Scotia are Amherst, Joggins, Oxford, Oxford